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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/345,659	06/30/1999	JAMES A. MICHENER	PD-990066	1480

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THE DIRECTV GROUP INC
PATENT DOCKET ADMINISTRATION RE/R11/A109
P O BOX 956
EL SEGUNDO, CA 90245-0956

EXAMINER

OPSASNICK, MICHAEL N

ART UNIT	PAPER NUMBER
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2626

SHORTENED STATUTORY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE
3 MONTHS	03/30/2007	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

Office Action Summary

Application No.

09/345,659

Applicant(s)

MICHENER, JAMES A.

Examiner

Michael N. Opsasnick

Art Unit

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 13 February 2007.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-3, 5-16 and 28-33 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-3, 5-16 and 28-33 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Rejections - 35 USC § 101

1. 35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

2. Claims 1-3,5-14,32 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter. As per the most recent interpretation of the Interim Guidelines regarding 35 U.S.C. 101, claims 1-3,5-14,32 define non-statutory processes because they merely manipulate an abstract idea (the mathematical manipulation of data (counting packets of data over time)) without a claimed limitation to produce a useful, concrete, tangible result. If the acts of a claimed process manipulate only numbers, abstract concepts or ideas, or signals representing any of the foregoing, the acts are not being applied to appropriate subject matter (Benson, 409 U.S. at 71-72, 175, USPQ at 676). Furthermore, claims define nonstatutory processes if they simply manipulate abstract ideas (Warmerdam, 33 F.3d at 1360,31 USPQ2d at 1759). Lastly, in evaluating claims in view of 35 U.S.C. 101, the "limited to the technological arts" test is no longer valid (see Annex III of the Interim Guidelines).

Allowable Subject Matter

3. Claims 1-3,5-14 are allowable over the prior art of record.

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims 15,16,28-31 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hiroi (6549241) in view of Rao et al (6253293).

As per claim 15, Hiroi (6549241) teaches an uplink transmitting AC-3 audio with video transmissions in a satellite broadcast system (col. 4 lines 35-50; col. 5 lines 60-65) comprising:

“an encoder.....digital transport packets” as data process handling the input signal (fig. 1), and mixing the signal to audio and video signals (fig. 1, subblock 150 -- stream combiner)

“a multiplexer.....guide data” as multiplexing the information, including guide information (fig. 1, subblock 145; fig 5a – category lists; and figure 6)

“data being uplinked to a satellite in the direct satellite broadcast system” as exchanging information in a satellite tv broadcast system (col. 5 lines 60-65);

Hiroi (6549241) does not explicitly teach sensing a plurality of audio signal formats and redirecting the signals to a plurality of encoders (Hiroi (6549241) teaches separation of multistream data), however, Rao et al (6253293) teaches a processor that receives multiple audio input formats (col. 2 lines 14-21, col. 3 lines 17-25) and outputs the differing audio signals to the output lines (col. 4 lines 50-53) to the appropriate codecs (col. 4 lines 55-58). Therefore, it would have been obvious to one of ordinary skill in the art of multistream data handlers to modify the teachings of Hiroi (6549241) with a multichannel audio decoder as taught by Rao et al (6253293) because it would advantageously provide for the ability of handling different types of audio data and process this information efficiently (Rao et al (6253293), col. 2 lines 45-55).

As per claims 16,28, the combination of Hiroi (6549241) in view of Rao et al (6253293) teaches detection of format type (Rao et al (6253293) ,as detecting different audio types, including differentiation between AC3 and S/PDIF) and using the microcontroller to determine the appropriate output port (Rao et al (6253293) ,Fig. 1b, DAO or XMT).

Claims 29-31 are method claims that are similar in scope and content of apparatus claims 15,16, and 28; therefore, method claims 29-31 are rejected under similar rationale as presented above against claims 15,16, and 28.

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6. Claims 32 and 33 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hiroi (6549241) in view of Rao et al (6253293) in further view of Gaalaas et al (6226758).

As per claims 32,33, Hiroi (6549241) teaches an uplink transmitting AC-3 audio with video transmissions in a satellite broadcast system (col. 4 lines 35-50; col. 5 lines 60-65) comprising:

“an encoder.....digital transport packets” as data process handling the input signal (fig. 1), and mixing the signal to audio and video signals (fig. 1, subblock 150 -- stream combiner)

“a multiplexer.....guide data” as multiplexing the information, including guide information (fig. 1, subblock 145; fig 5a – category lists; and figure 6)

“data being uplinked to a satellite in the direct satellite broadcast system” as exchanging information in a satellite tv broadcast system (col. 5 lines 60-65);

Hiroi (6549241) does not explicitly teach sensing a plurality of audio signal formats and redirecting the signals to a plurality of encoders (Hiroi (6549241) teaches separation of multistream data), however, Rao et al (6253293) teaches a processor that receives multiple audio input formats (col. 2 lines 14-21, col. 3 lines 17-25) and outputs the differing audio signals to the output lines (col. 4 lines 50-53) to the appropriate codecs (col. 4 lines 55-58). Therefore, it would have been obvious to one of ordinary skill in the art of multistream data handlers to modify the teachings of Hiroi (6549241) with a multichannel audio decoder as taught by Rao et al (6253293) because it would advantageously provide for the ability of handling different types of audio data and process this information efficiently (Rao et al (6253293), col. 2 lines 45-55).

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The combination of Hiroi (6549241) in view of Rao et al (6253293) does not explicitly teach processing AES-3 data (Rao suggests multiple formats, but does not detail AES processing), however, Gaalaas et al (6226758) teaches using an encoder with AES3/SIP DIF encoder/decoder (Fig. 2). Therefore, it would have been obvious to one of ordinary skill in the art of signal processing circuitry design to incorporate the processor of Gaalaas into the combination of Hiroi (6549241) in view of Rao et al (6253293) because it would add the functionality of handling AES formats (Gaalaas et al (6226758), col. 2 lines 25-45; and Rao permits the added functionality by addressing multiple formats).

Response to Arguments

7. Applicant's arguments filed 2/13/2007 have been fully considered but they are not persuasive. As per applicant's arguments on page 8 of the response, examiner disagrees and argues that the CDI line of RAO is designed to handle multiple formats, and based on the incoming bitstream, determines if the bitstream is S/PDIF or AC-3.

Conclusion

8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Michael Opsasnick, telephone number (571)272-7623, who is available Tuesday-Thursday, 9am-4pm.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mr. Richemond Dorvil, can be reached at (571)272-7602. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

mno



primary examiner

AU2626

03/29/07